IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appeal No.:	2011-006796
In re:	Application No. 10/601,912
Filed:	June 23, 2003
Applicants:	Richard L. ANTRIM et al.
Title:	DEXTRINIZED, SACCHARIDE-DERIVATIZED OLIGOSACCHARIDES
Art Unit:	1623
Examiner:	Layla D. BLAND
Attorney Docket:	8970.95081
Customer No.:	74456

Confirmation No. 7581

CERTIFICATE OF EFS-WEB TRANSMISSION

I hereby certify that this correspondence is being transmitted via the United States Patent and Trademark Office (USPTO) electronic filing system (EFS-Web) to the USPTO on April 29, 2011.

Allen E. Hoover
Registration No. 37,354

Mail Stop APPEAL BRIEF -- PATENTS
Commissioner for Patents
P. O. Box 1450
Alexandria, Virginia 22313-1450

NOTICE OF DECISION IN RELATED APPEAL

Sir:

Appellants previously identified Application No. 10/874,686 in its opening Brief as pending before the Board of Appeals as a related appeal.

Subsequent to this identification, on April 20, 2011, a decision was mailed in the related appeal. A copy of the decision is attached hereto.

As discussed throughout its Briefs, Appellants again note that Levine fails to teach a catalyst as recited in the present claims as the extruder in Levine is operated as 118°C, which is less than the melting point of malic acid such that the malic acid will not function as a catalyst.

Appellants respectfully request that should the present Notice be an inappropriate form to notify the Board of the decision in the related appeal, that the undersigned attorney be contacted to provide the proper form.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY

Dated: April 29, 2011

Allen E. Hoover
Registration No. 37,354

120 South LaSalle Street, Suite 1600
Chicago, Illinois 60603-3406
Telephone (312) 577-7000
Facsimile (312) 577-7007
584548

Attachment: Decision On Appeal

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/874,686	06/22/2004	Richard L. Antrim	8970.95085	5043

74456 7590 04/20/2011
FITCH, EVEN, TABIN & FLANNERY
120 SOUTH LASALLE STREET
SUITE 1600
CHICAGO, IL 60603-3406

EXAMINER	
BLAND, LAYLA D	
ART UNIT	PAPER NUMBER
1623	
MAIL DATE	DELIVERY MODE
04/20/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RICHARD L. ANTRIM, FRANK W. BARRESI,
ROGER E. McPHERSON, and JIAO WANG

Appeal 2010-008073
Application 10/874,686
Technology Center 1600

Before DEMETRA J. MILLS, FRANCISCO C. PRATS, and
STEPHEN WALSH, Administrative Patent Judges.

MILLS, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134. The Examiner has rejected the claims for anticipation and obviousness. We have jurisdiction under 35 U.S.C. § 6(b).

STATEMENT OF CASE

The following claims are representative.

25. A process for preparing a mixture of saccharide-derivatized oligosaccharides, comprising:

providing a reaction mixture comprising a saccharide having a degree of polymerization ranging from 1 to 4, a first oligosaccharide having a degree of polymerization of at least 5, and a second oligosaccharide having a degree of polymerization of at least 20;

selecting a desired polymolecularity index for the mixture of saccharide-derivatized oligosaccharides;

selecting extrusion conditions, which, when applied, produce a mixture of saccharide-derivatized oligosaccharides having the polymolecularity index; and extruding the reaction mixture under the extrusion conditions, wherein the extruding imparts sufficient energy and work to derivatize at least the first oligosaccharide with the saccharide, to produce the mixture of saccharide-derivatized oligosaccharides, wherein the mixture of saccharide-derivatized oligosaccharides has the desired polymolecularity index, said derivatizing being catalyzed with an acid.

26. A process for preparing a mixture of saccharide-derivatized oligosaccharides, comprising:

providing a reaction mixture comprising a saccharide having a degree of polymerization ranging from 1 to 4, a first oligosaccharide having a degree of polymerization of at least 5, and a second oligosaccharide having a degree of polymerization of at least 20;

selecting a desired number average molecular weight Mn for the mixture of saccharide-derivatized oligosaccharides;

selecting extrusion conditions, which, when applied, produce a mixture of saccharide-derivatized oligosaccharides having the desired number average molecular weight Mn; and

extruding the reaction mixture under the extrusion conditions, wherein the extruding imparts sufficient energy and work to derivatize at least the first oligosaccharide with the saccharide, to produce the mixture of saccharide-derivatized oligosaccharides, wherein the mixture of saccharide-derivatized oligosaccharides has the desired average molecular weight Mn, said derivatizing being catalyzed with an acid.

27. A process for preparing a mixture of saccharide derivatized oligosaccharides, comprising:

providing a reaction mixture comprising a saccharide having a degree of polymerization ranging from 1 to 4, a first oligosaccharide having a degree of polymerization of at least 5, and a second oligosaccharide having a degree of polymerization of at least 20; and

derivatizing at least the first oligosaccharide with the saccharide, to produce the mixture of saccharide-derivatized oligosaccharides, said derivatizing being catalyzed with an acid.

55. A process for preparing a mixture of saccharide-derivatized oligosaccharides, comprising:

providing reaction mixture comprising a first oligosaccharide having a degree of polymerization of at least 5; a second oligosaccharide, which is a hydrogenated oligosaccharide; and a saccharide in an amount effective to derivatize the oligosaccharides via extrusion, the amount being sufficient to prevent significant charring of the derivatized product but insufficient to yield a liquid product upon extrusion; and

extruding the reaction mixture, wherein the extruding imparts sufficient energy and work to derivatize at least the first oligosaccharide with the saccharide, to produce the mixture of saccharide-derivatized oligosaccharides, said derivatizing being catalyzed with an acid.

56. A process for preparing a mixture of saccharide-derivatized oligosaccharides, comprising:

providing a reaction mixture comprising a mixture of malto-oligosaccharides in which at least a portion of the malto-oligosaccharides in the mixture have a degree of polymerization greater than 5; optionally, a hydrogenated oligosaccharide; and a saccharide in an amount effective to derivatize the mixture of malto-oligosaccharides via extrusion,

the amount being sufficient to prevent significant charring of the derivatized product but insufficient to yield a liquid product upon extrusion; and

extruding the reaction mixture, wherein the extruding imparts sufficient energy and work to derivatize at least the malto-oligosaccharide with the saccharide, to produce the mixture of saccharide-derivatized oligosaccharides, said derivatizing being catalyzed with an acid.

57. A process for dextrinizing a saccharide starting material selected from the group consisting of malto-oligosaccharides, starch, limit dextrins, prelimit dextrins, and a hydrogenated oligosaccharide, the process comprising extruding the starting material, wherein the extruding imparts sufficient energy and work to convert at least a portion of 1-4 saccharide bonds in the starting material to other bonds, to produce dextrinized saccharide, said derivatizing being catalyzed with an acid.

Cited References

Levine et al.	US 5,009,900	Apr. 23, 1991
Fouache et al.	US 6,630,586 B1	Oct. 7, 2003

Grounds of Rejection

1. Claims 25-27 and 55-57 are rejected under 35 U.S.C. § 102(b) for anticipation over Levine.

2. Claims 55-57 are rejected under 35 U.S.C. § 102(e)/103(a) for anticipation/obviousness over Fouache.

FINDINGS OF FACT

The Examiner's fact findings are set forth in the Answer at pages 4-7. Additional findings of fact are set forth below.

1. Generally the application of heat and/or material energy is necessary to dextrinize the oligosaccharides or other starting material. (Spec. 13, ¶ 36.)
2. The reaction is catalyzed using an acid, which is present in an amount ranging from 0.01 to about 1.5% by weight percent. (Spec. 12, ¶ 32.)

Discussion

1. Claims 25-27 and 55-57 are rejected under 35 U.S.C. § 102(b) for anticipation over Levine.

ISSUE

The Examiner concludes that Levine teaches each element claimed and therefore inherently teaches a process for preparing the product having the desired properties.

Appellants argue that Levine does not teach an acid catalyst or a derivatized product, as claimed.

The issue is: Does the cited prior art teach an acid catalyst and derivatized product, as claimed?

PRINCIPLES OF LAW

In order for a prior art reference to serve as an anticipatory reference, it must disclose every limitation of the claimed invention, either explicitly or inherently. *See In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997).

"In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness. Only if that burden is met, does the burden of coming forward with evidence or argument shift to the applicant." *In re Rijckaert*, 9 F.3d 1531, 1532 (Fed. Cir. 1993) (citations omitted). In order to determine whether a prima facie case of obviousness has been established, we consider the factors set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966): (1) the scope and content of the prior art; (2) the differences between the prior art and the claims at

issue; (3) the level of ordinary skill in the relevant art; and (4) objective evidence of nonobviousness, if present.

"The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007).

ANALYSIS

We agree with the Examiner's fact finding, statement of the rejection and responses to Appellants' arguments as set forth in the Answer. We provide the following additional comment.

Appellants argue that Levine does not teach an acid catalyst or a derivatized product, as claimed. (App. Br. 8).

With respect to the acid catalyst, Levine teaches in Example 2, 1 part by weight of malic acid for each 2 parts by weight of strawberry flavor. Appellants have not shown that this amount of malic acid is insufficient to function as a catalyst. Appellants argue that "Example 2 discloses that the extruder is operated at a temperature not exceeding 118°C, which is below the melting point of malic acid and thus insufficient to cause malic acid to function as a catalyst." (Id. at 7.) We are not persuaded. The Specification, page 13, indicates that the extrusion conditions require a temperature in the range of 25°C to 220°C. Thus, the temperature range of Levine overlaps with the claimed extrusion conditions.

Appellants argue that the claims require a derivatized oligosaccharide, and Levine does not disclose a derivatized product. We are not convinced by this argument. According to the Specification, generally the application of heat and/or material energy is necessary to dextrinize the oligosaccharides

or other starting material. (Spec. 13, ¶ 36.) Levine discloses the application of both heat and material energy of extrusion to the saccharide and oligosaccharide reagents, thus inherently causing derivatization of the product.

We affirm the anticipation rejection over Levine.

CONCLUSION OF LAW

The cited reference supports the Examiner's anticipation rejection.

2. Claims 55-57 rejected under 35 U.S.C. § 102(e)/103(a) for anticipation and/or obviousness over Fouache.

ISSUE

Appellants argue that Fouache does not teach a process including an extrusion of the reaction mixture.

The issue is: Does the cited prior art teach extruding as claimed.

ANALYSIS

The Examiner argues that Fouache teaches the use of a BUSS blender at col. 7, Example 1. (Ans. 6.) We do not find that the Examiner has provided sufficient evidence that the BUSS blender of Example 1 functions as an extruder. The Examiner has not shown that the reaction conditions of Example 1 of Fouache, particularly the rate and dwell time of adding reactants to the blender, are extrusion conditions. Thus, the Examiner has not explained why it would have been obvious to one of ordinary skill in the art to use an extruder in place of a blender, or established their equivalence with sufficient evidence.

The obviousness rejection is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

cdc